APPARATUS AND METHOD FOR POWER MANAGEMENT IN A TIRE PRESSURE MONITORING SYSTEM

Abstract of the Disclosure

A system (10) and method manages battery (13) power in a wheel module (11) for indicating when air pressure in a tire falls below a recommended value. Tire air pressure is sensed with a pressure sensor (16). Tire air temperature is sensed with a temperature sensor (18). A determination is made whether the air pressure is increasing or decreasing with respect to time. Based upon whether a ratio of the air pressure and the air temperature is increasing, decreasing or remaining constant with respect to time, tire motion is inferred without directly sensing acceleration or movement of the tire. Power management circuitry (14) controls battery power to enable sensing of air pressure and air temperature at measurement intervals that are longer in time when the tire is not in motion.